

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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11. (Previously presented) A stereo image measuring device comprising:
a setting unit for setting regarding a stereo image including at least three or more points of measurement having position data thereof obtained, at least a part of the points of measurement as division points, and then setting a search area based on at least three division points, and then setting a search area based on at least three division points selected from a plurality of the set division points;

an arithmetic operation unit for executing correlation processing for images of search areas corresponding to each other on the stereo image based on the search area set by the setting unit; and

a measuring unit for measuring a coordinate of a point in a given position based on a result of the correlation executed by the arithmetic operation unit, and

a display unit for displaying a stereo image,

wherein the arithmetic operation unit prepares information regarding an area of measurement where a new point of measurement is required, according to the result of the correlation processing,

the display unit executes predetermined displaying for an area where additional measurement is required in a graphic manner according to the information of the area of measurement prepared by the arithmetic operation unit, and position data is received when the position data of the new point of measurement in the area is measured by an external survey instrument based on the graphic displaying of the display unit.

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14. (Original) The stereo image measuring device according to claim 11, wherein the measuring unit outputs the information of the area of measurement prepared by

the arithmetic operation unit to an auto-tracking total station, causes the total station to measure a position of a new point of measurement in an area indicated by the area data, and then receives the measured position data.

15. (Original) The stereo image measuring device according to claim 11, wherein

the setting unit selects points of measurement in an area where detailed division is required as new division points according to the information of the area of measurement prepared by the arithmetic operation unit, and then sets new search areas on the stereo image, and

the arithmetic operation unit executes correlation processing for images of the new search areas.

16. (Original) The stereo image measuring device according to claim 11, wherein the setting unit sets, in each stereo image, an inclusion square including a triangle composed of three adjacent points selected from the obtained division points, alternatively from points of measurement, as a search area.

17. (Previously presented) The stereo image measuring device according to claim 11, wherein the setting unit sets a reference data block in the search area of a first image of the stereo image, and a search data block in the other of the search areas of a second image of the stereo image, and then sets a position, alternatively a moving step of at least one of the reference data block and the search data block according to a distance from the division point.

18. (Previously presented) The stereo image measuring device according to claim 11, wherein the setting unit sets a reference data block in the search areas of a first image of the stereo image, and a search data block in the search areas of a second image of the stereo image, and then sets a size of at least one of the reference data block and the search data block according to a distance from the division point.

19. (Previously presented) The stereo image measuring device according to claim 11, wherein the setting unit sets reference data block in the search areas of a first image of the stereo image, and a search data block in the search areas of a second image of the stereo image, sets a plurality of data blocks having different sizes in the vicinity of the division point, obtains a result of correlation, and decides a size of at least one of the reference data block and the search data block according to the result of the correlation.

20. (Previously presented) The stereo image measuring device according to claim 11, wherein the setting unit sets a reference data block in the search areas of a first image of the stereo image, and a search data block in the search areas of a second image of the stereo image, and then decides a size of the at least one of the reference data block and the search data block according to a size of search area.

21. (Original) The stereo image measuring device according to claim 11, wherein

the setting unit sets a data block based on the set search area, the data block being smaller than the search area, and

the arithmetic operation unit sets a block equivalent to the data block of one image of the stereo image as a template, scans the other image of the stereo image in a vertical position similar to that of the template, and searches a data block corresponding to the template based on a calculated correlation value.

22. (Currently Amended) A stereo image measuring method comprising:

a setting step of setting, regarding a stereo image including at least three or more points of measurement having position data thereof obtained, at least a party of the points of measurement as division points, and then setting a triangle search area based on three division points selected from a plurality of the set division points;

an arithmetic operation step of executing correlation processing for images of search areas corresponding to each other on the stereo image based on the search area set by the

setting unit, wherein information is prepared regarding an area of measurement where a new point of measurement is required according to the result of the correlation processing; and

when position data of a new point of measurement in the area is measured by an external survey instrument based on the graphic displaying executed in the displaying step, the position data is received

a measuring step of measuring a coordinate of a point in a given position from a result of the correlation executed by the arithmetic operation unit; and

a displaying step for displaying the stereo image,

wherein the area where additional measurement is required is displayed in a graphic manner, and

wherein the position data is received when position data of a new point of measurement in the area is measured by an external survey instrument based on the graphic displaying executed in the displaying step.

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